

REMARKS

The present application contains claims 1-10. As discussed in greater detail hereinafter, pending claims 1-10 patentably distinguish over the art of record for the reasons given below. Applicants request reconsideration of the rejection in view of the following comments.

35 U.S.C § 102(e) Rejection of Claims 1 and 6

The examiner has rejected claims 1 and 6 under 35 U.S.C § 102(e) as “anticipated by Boyce (Provisional App #604496426) “Video comfort noise addition technique.”

The examiner’s rejection based on provisional application 60/496,426 fails because 35 U.S.C § 102(e) requires a **published** application. As set forth in 35 U.S.C. § 122(C)(2), provisional application do not undergo publication. Therefore, a provisional application does not constitute an application published under 122(C), thus making the rejection improper.

Applicants acknowledge that their co-pending US application Serial No. 10/566,881, published as US 2006056871, on November 16, 2006, claims priority to the cited provisional application 60/496,426. Assuming arguendo, the examiner legitimately rejected claims 1 and 6 under 35 U.S.C § 102(e) as anticipated by published application US 2006056871, the rejection would still fail because the published application does not teach each and every feature of applicants’ claims.

Applicants’ claims 1 and 6 both include the feature of:

making a determination, in accordance with the at least one parameter, whether to add the temporally correlated noise, and if so, adding such noise to the image at a level in accordance with the at least one parameter, to substantially hide artifacts

In rejecting claims 1 and 6, the examiner contends that equation (3) teaches this claimed feature when the correlation factor α equals zero (no noise). Applicants respectfully traverse the examiner’s rejection.

The correlation factor α described in published application US 2006056871 relates to the correlation between a pixel in the present picture and a corresponding pixel in one of a previously displayed or previously decoded picture. As is clear from

paragraphs [11] – [15] of published application US 2006056871, the correlation factor α **does not constitute a parameter within received supplemental information** as recited in claim 1. Indeed, the correlation factor α relates to the embodiment of FIG. 1 of the published application US 2006056871 which **does not make use of supplemental information**. Therefore, the examiner has not shown that published application US 2006056871 discloses **each and every** feature of applicants' claims 1 and 6. Thus the 35 U.S.C § 102(e) rejection fails and applicants request withdrawal of the rejection of these claims.

35 U.S.C. 102(a) Rejection of Claims 1, 6, and 8-10

The examiner has reiterated his rejection of Claims 1, 6, and 8-10 under 35 U.S.C. 102(a) as anticipated by the publication "SEI Message for Film Grain Encoding", Cristina Gomila et al., Joint Video Team (JVT) of ISO/IEC MPEG ITU-T-VCEG, 8th Meeting, Geneva CH 23-27 May 2003 (hereinafter, the Gomila et al. publication), which as discussed below, concerns film grain simulation. Applicants respectfully traverse this rejection.

Notwithstanding applicants' assertion to the contrary in their previous response, the examiner persists in suggesting that adding film grain to an image, as disclosed in the cited reference, constitutes the hiding of artifacts. In actuality, the Gomila et al publication teaches exactly the opposite. As discussed at Section 2 (Introduction) on page 1 of the Gomila et al. publication, compression of video images containing film grain serves to greatly reduce if not eliminate the grain present in the compressed image ("grain is difficult to preserve."). Thus, compression of a video image containing film grain, as taught by Gomila et al., tends to reduce the grain, which constitutes high frequency noise, **thereby reducing artifacts**. Hence, simulating grain for insertion into decoded pictures, as taught by Gomila, serve to introduce noise into such pictures, thus **adding** artifacts. Adding film random noise to simulate film grain into a decoded image to add artifacts constitutes the complete opposite of applicants' claimed technique to add comfort noise to hide artifacts.

In summary, the Gomila et al. publication teaches the complete opposite of applicants' invention claimed in claims 1 and 6 and claims 9 and 10 which depend from claim 6. Therefore, applicants' claims 1, 6, 9, and 10 patentably distinguish

over the art of record. Withdrawal of the 35 U.S.C § 102(e) rejection of these claims is requested.

35 U.S.C § 103(a) Rejection of Claims 2, 3, 5, 7, and 8

Claims 2, 3, 5, 7, and 8 stand rejected under 35 U.S.C § 103(a) as obvious over the Gomila et al. publication, discussed above, further in view of US patent 5,768,403 to Suzuki et al. Applicants respectfully traverse the rejection for the reasons given below.

Applicants have discussed the Gomila et al. publication at length above and for the sake of brevity, will not repeat that discussion again. For the purpose of addressing the instant rejection, applicants reiterate that the Gomila et al. publication does not teach or suggest the desirability of adding temporally correlated noise for hiding artifacts, let alone the feature of

making a determination, in accordance with the at least one parameter, whether to add the temporally correlated noise, and if so, adding such noise to the image at a level in accordance with the at least one parameter, to substantially hide artifacts.

Indeed, as discussed above, the Gomila et al. publication teaches completely the opposite, namely adding noise to **create** artifacts, not hide them.

The Suzuki et al. patent concerns a technique for identifying an image area using pixel values to determine the presence of various colors. The patent says nothing at all regarding the desirability of adding noise to an image to substantially hide artifacts, let alone making a determination of whether to add noise, and if so how much based on supplemental information carried with the image. Given that neither the Gomila et al. publication nor the Suzuki et al. patent teach the desirability of adding temporally correlated noise to an image to *hide artifacts*, the combination of these references would not teach all of the features of applicants' claims 1 and 6, nor claims 2, 3, 5, 7, and 8 that depend therefrom. Moreover, the fact that the Gomila et al. publication teaches away from adding noise to hide artifacts renders the combination with the Suzuki et al. patent improper. For these reasons, applicants request withdrawal of the 35 U.S.C. 103(a) rejection of claims 2-5 and 7-10

Conclusion

In view of the foregoing, applicants solicit entry of this amendment and allowance of the claims. If the Examiner cannot take such action, the Examiner should contact the applicant's attorney at (609) 734-6820 to arrange a mutually convenient date and time for a telephonic interview.

No fees are believed due with regard to this Amendment. Please charge and fee or credit any overpayment to Deposit Account No. **07-0832**.

Respectfully submitted,
Jill M. Boyce et al.

By: /Robert B. Levy/
Robert B. Levy, Attorney
Reg. No. 28,234
Phone (609) 734-6820

Patent Operations
Thomson Licensing LLC
P.O. Box 5312
Princeton, New Jersey 08543-5312
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